

CLAIMS:

5 What is claimed is:

10 1. An inductively-coupled, electrodeless fluorescent lamp comprising; a lamp body having two opposed sides; an induction coil on one side of said body; and a magnetically transparent electrostatic shield interposed between said induction coil and said one side of said body, said shield comprising an insulating substrate; an electrically conductive layer on said substrate including means for reducing capacitive coupling between a voltage on said induction coil and a plasma discharge within said lamp body, said electrically conductive layer having a thickness between 400 Å and 1000 Å, inclusive.

15 2. The lamp of Claim 1 wherein said means for reducing capacitive coupling comprises a plurality of slots in said electrically conductive layer.

20 3. A magnetically transparent electrostatic shield comprising: an insulating substrate; an electrically conductive layer on said substrate including means for reducing capacitive coupling between a voltage on an induction coil and a plasma discharge, said electrically conductive layer having a thickness between 400 and 1000 Å.

25 4. The transparent shield of Claim 3 wherein said means for reducing capacitive coupling comprises a plurality of slots in said electrically conductive layer.

5. A method of increasing the efficiency of an inductively-coupled, electrodeless fluorescent lamp comprising the steps of; providing a lamp body having two opposed sides; positioning an induction coil on one side of said body; and positioning a magnetically transparent electrostatic shield between said induction coil and said one side of said body,

said shield comprising an insulating substrate; an electrically conductive layer on said substrate including means for reducing radio frequency capacitive coupling between a voltage on said induction coil and a plasma discharge within said lamp body, said electrically conductive layer having a thickness between 400 Å and 1000 Å, inclusive; and inducing an

5 operating voltage on said lamp through said induction coil.

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